**OVERALL PROJECT PURPOSE**

The purpose of the project is to provide reliable, convenient, efficient, and sustainable transit service in the GA 400 Corridor by:

- Providing high capacity transit (bus and/or rail) through the GA 400 corridor study area,
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- Enhancing mobility and accessibility to and within the study area by providing a more robust transit network that offers an alternative to automobile travel.

**GOAL 1**

**Improve Mobility and Access**

**FRAMEWORK**

**NORTH / SOUTH**

**EAST / WEST**

**CONNECTIVITY**

**OBJECTIVES**

- Improve transit access and connectivity to employment, education, residential, and activity centers within the study area and the region
- Increase transit ridership and capacity
- Improve transit travel times and reliability for all trip purposes
- Improve multimodal connections and access to the existing transit systems
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GOAL 2
Support Land Use and Economic Development Planning

OBJECTIVES
- Complement land use plans of study area jurisdictions
- Support planned and potential economic development
- Provide opportunities for compact land development that supports transit ridership
GOAL 3
Provide Cost-Effective Transit Service

OBJECTIVES
• Maximize operating cost-efficiency
• Match the transportation investment to the study area’s level of travel demand
• Provide a cost-effective transit system

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GOAL 4
Minimize Environmental Impacts

OBJECTIVES
- Avoid, minimize, and mitigate impact to cultural, historic, and environmentally sensitive areas
- Avoid, minimize, and mitigate negative impacts on the surrounding community, including parks
## Transportation Challenges Evaluation Framework

### Goals and Objectives Evaluation Criteria Performance Measures

<table>
<thead>
<tr>
<th>Goal 1: Improve Mobility and Access</th>
<th>Evaluation Criteria</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobility</strong></td>
<td>Total daily project transit boardings</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>New transit riders</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Number of transfers per linked trip</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Total passengers per mile</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Potential impacts to roadway capacity</td>
<td>X X X</td>
</tr>
<tr>
<td></td>
<td>Annual corridor crash reductions</td>
<td>X</td>
</tr>
<tr>
<td><strong>Travel Times</strong></td>
<td>Transit travel time savings</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Differences in transit and auto travel times between various origins and destinations in the study area</td>
<td>X</td>
</tr>
<tr>
<td><strong>Accessibility and Connectivity</strong></td>
<td>Projected population, household, and employment within a 10 minute walk and drive of stations</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Major trip generators/activity centers within a 10 minute walk and drive of stations</td>
<td>X X X</td>
</tr>
<tr>
<td></td>
<td>Low-income, minority, elderly and zero-car populations/households within a 10 minute walk of stations</td>
<td>X X</td>
</tr>
<tr>
<td></td>
<td>Interface with existing transit and future Concept 3 rapid transit service</td>
<td>X X</td>
</tr>
<tr>
<td></td>
<td>Maximize walking and bicycling accessibility to stations</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Use and Development</strong></td>
<td>Consistency with adopted local and regional plans</td>
<td>X</td>
</tr>
<tr>
<td><strong>Potential for TOD</strong></td>
<td>Acres of land with economic development incentives within ½ mile of stations</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Projected population and employment densities within ½ mile of stations</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Acres of transit-supportive future land uses and zoning within ½ mile of stations</td>
<td>X X</td>
</tr>
<tr>
<td></td>
<td>Acres of vacant or underutilized land within ½ mile of stations</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 3: Provide Cost-Effective Transit Service</th>
<th>Evaluation Criteria</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Costs</strong></td>
<td>Annual Operations and Maintenance (O&amp;M) Costs</td>
<td>X X</td>
</tr>
<tr>
<td></td>
<td>Construction Capital Costs</td>
<td>X X X</td>
</tr>
<tr>
<td></td>
<td>Right of Way Costs</td>
<td>X X</td>
</tr>
<tr>
<td><strong>Cost Effectiveness</strong></td>
<td>Cost Effectiveness Index (incremental costs divided by transportation system user benefit)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Incremental cost per new rider</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 4: Minimize Environmental Impacts</th>
<th>Evaluation Criteria</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Quality</strong></td>
<td>Acres of potentially impacted wetlands and waterbodies within 500 feet of alignments and ½ mile of stations</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Number of potentially impacted historic resources within 500 feet of alignments and ½ mile of stations</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Acres of noise sensitive land uses within 700 (HRT), 350 (LRT), or 200 (BRT) feet of alignments</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Number of contaminated and hazardous material sites within ½ mile of alignments</td>
<td>X</td>
</tr>
<tr>
<td><strong>Air Quality</strong></td>
<td>Change in Vehicle Miles Traveled (VMT)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Change in daily emissions of air quality pollutants (CO, NOx, PM2.5, PM10)</td>
<td>X</td>
</tr>
<tr>
<td><strong>Environmental Justice</strong></td>
<td>Low-income, minority, elderly and zero-car populations/households near alignments</td>
<td>X</td>
</tr>
<tr>
<td><strong>Community Impact</strong></td>
<td>Estimated community impacts/disruptions and number of displacements</td>
<td>X X X</td>
</tr>
</tbody>
</table>
**PROJECT SUMMARY BOARD**

**WINDWARD STATION**

- **Existing Land Use/Zoning:** Office/institutional campuses, underdeveloped land, and some commercial uses.
- **Future Land Use:** Mixed-use development under construction in HR. Additional institutional and office campuses (Johns Hopkins University campus) medium density residential developing in RR area.
- **Vacant/Underutilized Land:** 252 Acres (46% of total land area)
- **Projected 2040 Population:** 1,738
- **Projected 2040 Employment:** 1,738
- **Opportunities:**
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.

**OLD MILTON**

- **Existing Land Use/Zoning:** Mixed-use development, underdeveloped land, and some commercial uses.
- **Future Land Use:** Mixed-use development under construction in HR. Additional institutional and office campuses (Johns Hopkins University campus) medium density residential developing in RR area.
- **Vacant/Underutilized Land:** 148 Acres (29% of total land area)
- **Projected 2040 Population:** 1,756
- **Projected 2040 Employment:** 2,137
- **Opportunities:**
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.

**COMMUNITY STATION**

- **Existing Land Use/Zoning:** Office/institutional campuses, underdeveloped land, and some commercial uses.
- **Future Land Use:** Mixed-use development under construction in HR. Additional institutional and office campuses (Johns Hopkins University campus) medium density residential developing in RR area.
- **Vacant/Underutilized Land:** 252 Acres (46% of total land area)
- **Projected 2040 Population:** 1,990
- **Projected 2040 Employment:** 3,911
- **Opportunities:**
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.
  - Significant amount of developable (open) land.

**NORTH POINT**

- **Existing Land Use/Zoning:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Future Land Use:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Vacant/Underutilized Land:** 66 Acres (13% of total land area)
- **Projected 2040 Population:** 2,927
- **Projected 2040 Employment:** 2,736
- **Opportunities:**
  - Mixed-use village will likely be support Transit Oriented Development (TOD).
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  - Mixed-use village will likely be support Transit Oriented Development (TOD).

**MANSELL**

- **Existing Land Use/Zoning:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Future Land Use:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Vacant/Underutilized Land:** 177 Acres (35% of total land area)
- **Projected 2040 Population:** 1,738
- **Projected 2040 Employment:** 1,738
- **Opportunities:**
  - Mixed-use village will likely be support Transit Oriented Development (TOD).
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  - Mixed-use village will likely be support Transit Oriented Development (TOD).

**HOLCOMB BRIDGE**

- **Existing Land Use/Zoning:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Future Land Use:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Vacant/Underutilized Land:** 107 Acres (21% of total land area)
- **Projected 2040 Population:** 2,403
- **Projected 2040 Employment:** 2,517
- **Opportunities:**
  - Mixed-use development, corporate office campuses, and some light industrial uses.
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  - Mixed-use development, corporate office campuses, and some light industrial uses.

**NORTH RIDGE**

- **Existing Land Use/Zoning:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Future Land Use:** Mixed-use development, corporate office campuses, and some light industrial uses.
- **Vacant/Underutilized Land:** 86 Acres (17% of total land area)
- **Projected 2040 Population:** 2,794
- **Projected 2040 Employment:** 2,794
- **Opportunities:**
  - Mixed-use village will likely be support Transit Oriented Development (TOD).
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Transit Technology Matrix

<table>
<thead>
<tr>
<th>VEHICLE</th>
<th>STOP/STATION</th>
<th>SERVICE</th>
<th>RIGHT OF WAY</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS</td>
<td>A local bus or a coach</td>
<td>Flexible stop locations. Various design options</td>
<td>Shared</td>
<td>VEHICLE COST</td>
</tr>
<tr>
<td>BUS RAPID TRANSIT (BRT)</td>
<td>Rubber-wheeled vehicles, various design options</td>
<td>Typically fixed stations with a pre-boarding payment. Some systems have flexible stop locations.</td>
<td>Exclusive, Shared, or Combination</td>
<td>VEHICLE COST</td>
</tr>
<tr>
<td>LIGHT RAIL TRANSIT (LRT)</td>
<td>Rail cars powered by overhead catenaries on a fixed guideway. Various design options, including Street Cars (SC).</td>
<td>Typically fixed stations with a pre-boarding payment. Some systems have flexible stop locations.</td>
<td>Exclusive, Shared, or Combination</td>
<td>VEHICLE COST</td>
</tr>
<tr>
<td>HEAVY RAIL TRANSIT (HRT)</td>
<td>Rail cars powered by electric fixed guideway</td>
<td>Fixed stations with elevated platform and pre-boarding payment.</td>
<td>Exclusive</td>
<td>VEHICLE COST</td>
</tr>
<tr>
<td>DIESEL MULTIPLE UNIT (DMU)</td>
<td>Self-propelled rail cars with a diesel engine, usually underneath the carriages. Can operate individually or be linked for longer trains</td>
<td>Fixed stations with elevated platform and pre-boarding payment.</td>
<td>Exclusive, usually on existing freight rail lines. New systems can operate similar to LRT</td>
<td>VEHICLE COST</td>
</tr>
<tr>
<td>AUTOMATED GUIDEWAY TRANSIT</td>
<td>Single elevated rail that provides support and electric power</td>
<td>Fixed stations with elevated platform and pre-boarding payment.</td>
<td>Exclusive</td>
<td>CONSTRUCTION / MILE</td>
</tr>
</tbody>
</table>

GA 400 Corridor Alternatives Analysis
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STUDY AREA
GA 400 Corridor Alternatives Analysis